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| FIRST GRADE  \*Standards printed in green need to be achieved before moving on to more complex standards. | | | |
| **Standard: OPERATIONS AND ALGEBRAIC THINKING (OA)** | Kathy Richardson Assessing Math Concepts | Aimsweb | Thompson Diagnostic |
| **Represent and solve problems involving addition and subtraction**  **Solve addition and subtraction word problems, and add and subtract *within 10*, e.g. by using objects or drawings to represent the problem.\***  Use addition and subtraction *within 20* to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.  Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. | **DNC: Chapter 2: Chapter 1**  Guide to Observation p.3 |  | Mid Year Assessment |
| **Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 +** 1).\*  Students develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. | **Assessment 4: Number Arrangements** |  | Mid Year Assessment |
| **For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. \***  Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. | **Assessment 6: Hiding Assessment** |  |  |
| **Understand and apply properties of operations and the relationship between addition and subtraction**  Apply properties of operations as strategies to add and subtract.  *Examples: If 8+3=11 is known, then 3+8=11 is also known.*  (Commutative property of addition.)  *To add 2+6+4, the second two numbers can be added to make a ten, so 2+6+4=12.* (Associative Property of addition.) | **Assessment 5: Combination Trains** |  | Mid Year Assessment  End of Year Assessment |
| **Add and subtract within 20**  Fluently add and subtract within 5.\*  Relate counting to addition and subtraction (counting on 2)  Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on, making ten (e.g., 8+6=8+2+4); decomposing a number leading to a ten (e.g., 13- 4=13-3-1); using the relationship between addition and subtraction and creating equivalent but easier or known sums (e.g., 6+6=12 so 6+7 is one more, 13). | **Assessment 5: Combination Trains**  **Assessment 6: Hiding Assessment**  **Assessment 7: Ten Frames** |  | Beginning of Year Assessment  End of Year Assessment |
| **Work with addition and subtraction equations**  Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. *For example, which of the following equations are true and which are false? 6=6, 7=8-1, 5+2=2+5, 4+1=5+2.*  Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the*  *equations 8* +*? = 11, 5 =* ␣ *– 3, 6 + 6 =* ␣*.* | **DNC: Chapter 2: Chapter 1**  Guide to Observation p.3 |  | End of Year Assessment |
| **Standard: NUMBER AND OPERATIONS IN BASE TEN (NBT)** |  |  |  |
| **Extend the counting sequence**  Count to120, starting at any number less than 120 in this range, read and write numerals and represent a number of objects with a written numeral. | **DNC Book 3 Chapter 1:**  Observation Sheet p. 8 | Oral Counting  Missing Number  Number Identification | Beginning of Year Assessment  Middle of Year Assessment  End of Year Assessment |
| **Understand place value**  Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: •10 can be thought of as a bundle of ten ones - called a "ten." The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.  •The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three four, five, six, seven, eight, or nine tens (and 0 ones.) Compare two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols › , =, and ‹. | **Assessment 7: Ten Frames Assessment 8: Grouping Tens** | Quantity Discrimination | Middle of Year Assessment  End of Year Assessment |
| **Uses place value understanding and properties of operations to add and subtract**  Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten.  Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. | **Assessment 8: Grouping Tens**  **Assessment 9.Two-Digit Addition and Subtraction** |  |  |
| **Other Data Collected** |  |  | Counting & Cardinality:  Beginning of Year Assessment  End of Year Assessment  Patterning:  Beginning of Year Assessment  End of Year Assessment  Geometry:  Beginning of Year Assessment  End of Year Assessment  Measurement/Money:  End of Year Assessment  Data:  End of Year Assessment |